University of Toronto
Computer Centre
10 King's College Road
TORONTO Ontario
M5S 1A1 Canada

416/928-2066

Janet Campbell, Editor

0022

GENERAL NEWS

PAGE

Back to School Special - Open House & Orientation .. 1
UTCC Publications 2
Marketing Services 3
The Terminal Co-ordinator 4
Computing in the Sidney Smith Building AST/ASUT..... 6
Welcome to Erindale 6
Erindale Computer Services Open House 7
Scarborough College Computer Centre 7
New Physics Terminal 8
Minicomputer Users Meeting 8
Personnel Changes 9
Recent Acquisitions in the Department of Computer Science Library 9

SYSTEM/370 SERVICES

Sandford Fleming Terminal News 11
SFT/EUT Advising 11
AST/ASUT Advising 11
Printer Setup at AST 12
SPSS Version 6 12
BMD News 13
BMDP News 13
Text Processing and the IBM Sort Program 14
TSO Topics: Extended Job Status 15
Correction 15
HSJS Monthly Statistics 15
S/370-165-II Reliability 17

INTERACTIVE TERMINAL SYSTEMS

Interactive Systems Reliability 20
Changes in Hours of Service - 360-65 20

COMPUTER RESEARCH FACILITY

Computer Research Facility Open House 22

DATATALK

Welcome to DATATALK 23
APL Information and Advisory Services 23
DATATALK Publications 24
DATATALK Dialogues 24

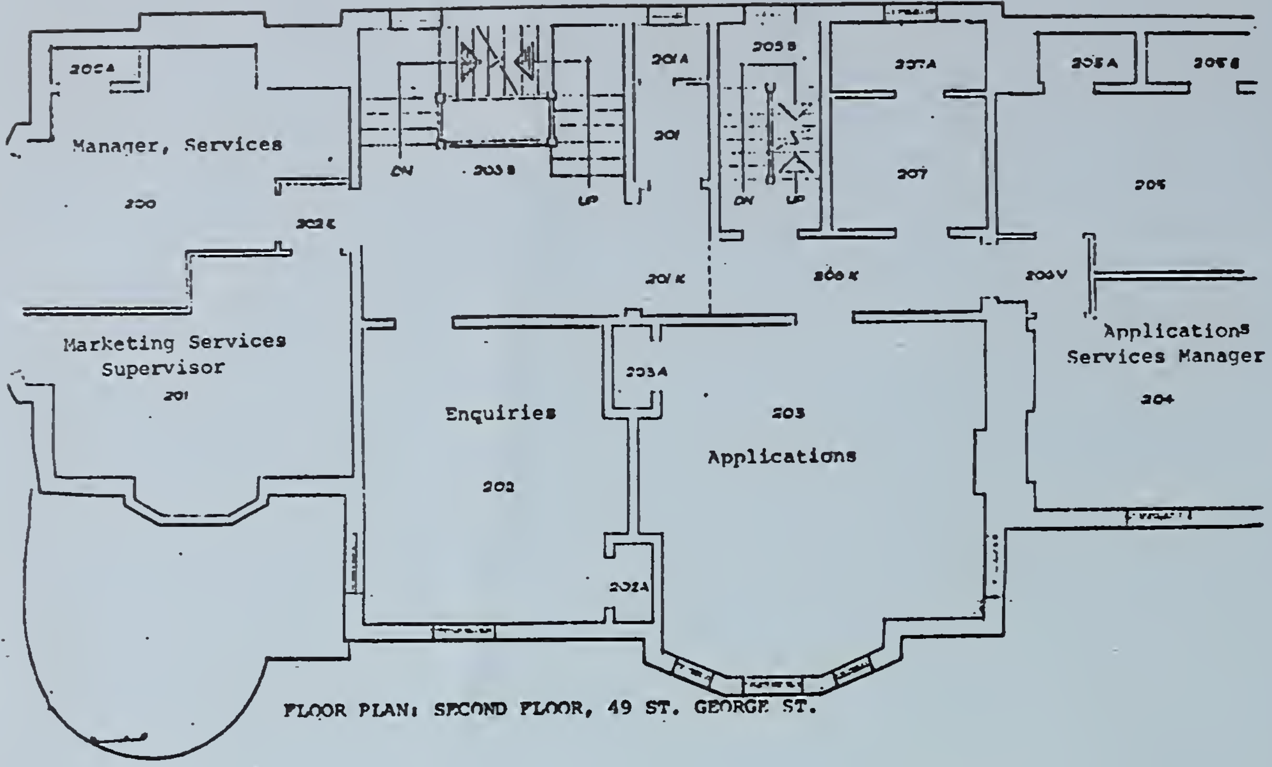
SUPPLEMENT

UTCC Computer Equipment 27
UTCC Directory 28

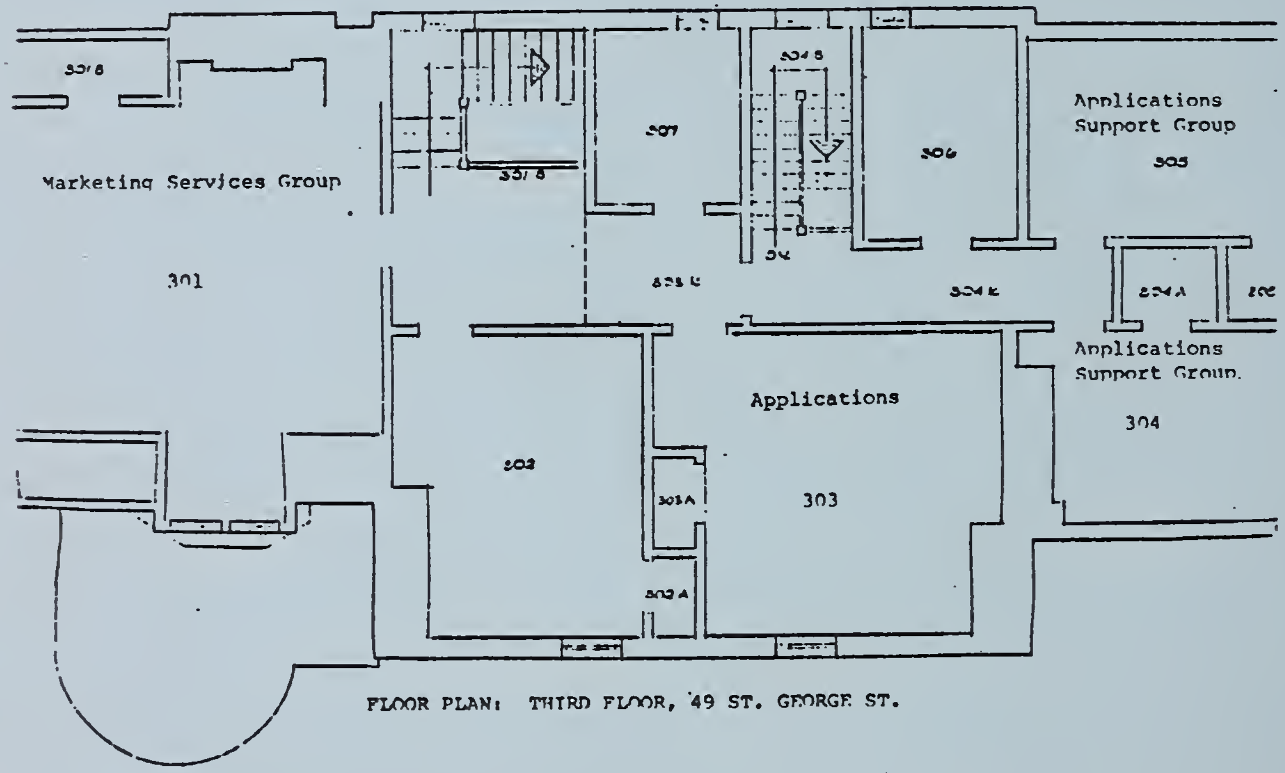
University of Toronto

COMPUTER NEWS

August 75 ISSN 0315-4661 No.127



FLOOR PLAN: SECOND FLOOR, 49 ST. GEORGE ST.



FLOOR PLAN: THIRD FLOOR, 49 ST. GEORGE ST.

COMPUTERNEWS is a monthly publication produced by the University of Toronto Computer Centre. Enquiries or contributions should be directed to the Editor, Janet Campbell or the Assistant Editors, Margo Harvie and Ruth Borenstein in the Sandford Fleming Building room SF125 or (416)-928-2066. Layout and ATS typing are provided by Lynne Jenkins. Subscription changes should be directed to the Information Office, Sandford Fleming Building room SF128 or (416)-928-4990.

....

Permission is granted to reprint articles from COMPUTERNEWS for noncommercial purposes provided the author, publication and issue are acknowledged.

BACK TO SCHOOL SPECIAL
OPEN HOUSE AND ORIENTATION

September is back, bringing with it new students and faculty along with many members of last year's user community. UTCC extends a warm welcome to all newcomers and a welcome back to old users. Each year at this time, the Computer Centre holds an Open House to give users a chance to get acquainted (or re-acquainted) with UTCC and sponsors orientation sessions for first year students who will be using the High Speed Job Stream.

ORIENTATION

The orientation sessions are usually given in the classroom by a UTCC staff member. The sessions provide a general description of computing at UTCC as well as a detailed discussion of the High Speed Job Stream, its processors, its purpose and general advice on how to use it efficiently. Documentation handouts, describing the use of the equipment and explaining some of the more basic computer jargon, will be distributed. If you are interested in having an orientation session given to one of your classes, contact Don Gibson at 928-5568, Room 128 in the Sandford Fleming Building.

OPEN HOUSE

September 17th and 18th
1 p.m. to 5 p.m.
Sandford Fleming Building
10 King's College Road

The events planned for this year's Open House should be of interest to both old and new users. For example, the terminal demonstrations will provide anyone who has been considering obtaining a keyboard terminal for APL, TSO or ATS usage with a chance to survey the various models available. UTCC has invited representatives from a number of distributers and manufacturers to set up demonstrations during Open House.

The Computer Research Facilities will also be demonstrating all those mysterious products of computer research, one of which can produce computer portraits! You can get your portrait taken for five dollars (billable to your Customer Account Number).

Other items of interest will be a computer art gallery, a publications display and films on computers and computer-related subjects. If you see something in the computer art gallery that catches your eye, you can buy a copy of it for the price of running the job which produces it.

If you have any questions about the Centre, its equipment or its services, our marketing representatives will be on hand to talk to you over a cup of coffee.

We look forward to seeing you this September!

cont'd...

BACK TO SCHOOL SPECIAL Cont'd.

SCARBOROUGH AND ERINDALE TERMINALS

Both Scarborough and Erindale terminals will be open for display on September 22 (Scarborough) and September 23 (Erindale). All of the Open House events mentioned above, except the keyboard terminal and Computer Research demonstrations, will be taking place at these two terminals on the above dates.

Don Gibson

UTCC PUBLICATIONS

The University of Toronto Computer Centre publishes a variety of documentation designed to describe and explain the services and facilities available to UTCC users. The following UTCC publications are available from the Information Office, located in the Sandford Fleming Building, room 128 and from the Computing Co-ordinators.

COMPUTERNEWS

The Computer Centre's newsletter is a monthly publication and is available free of charge to all UTCC users.

UTCC USERBOOK

The USERBOOK is the basic reference manual for all computing services available at UTCC. Its modular design allows each subscriber to compile a reference manual customized to meet individual documentation needs. The USERBOOK is updated on a regular basis and updates are mailed automatically to subscribers.

MINI GUIDE TO UTCC

This pocket-sized guide provides a general description of the computer facilities available at UTCC.

HOW TO SERIES

The HOW TO series of manuals is designed to assist users in the operation of the self-service equipment at UTCC. Each manual describes the basic techniques required to operate the equipment; step-by-step explanations are accompanied by examples and photographs. At present, the series contains three manuals. These are:

1. HOW TO USE
   AN IBM 029 KEYPUNCH
   AN IBM 2501 CARD READER
   AN IBM 1403 LINE PRINTER

2. HOW TO USE
   A REMCOM CARD READER
   A REMCOM LINE PRINTER
   A REMCOM TERMINAL STARTUP/PROCEDURE
   A REMCOM CARD PUNCH

3. HOW TO USE
   AN IBM 029 KEYPUNCH DRUM

DATATALK BROCHURE

This pocket-sized brochure introduces and describes DATATALK, a new UTCC service with emphasis on person-to-person communications. For a description of the DATATALK service, see the article WELCOME TO DATATALK appearing elsewhere in this issue of COMPUTERNEWS.

Janet Campbell

MARKETING SERVICES

UTCC is rather unique in that we are one of the few universities to have a distinct marketing function. We believe the Marketing Services group will enable UTCC to provide the best possible service for our customers.

A list of objectives has been drawn up and is outlined below.

1. Maintain current users by a continuing series of visits, and possibly, recommendations for improvements on existing systems if appropriate.
2. Inform and advise the user community as to the services available and potential areas of application for the user.
3. Generate new customers in the immediate University community.
4. Expand the customer group to outside the immediate University community.
5. Provide central site with recommendations for, evaluation of, and potential usage of 'new products' or services.
6. Provide an interface between the customer and UTCC, and act as a barometer to measure the effectiveness of the Centre as viewed by our customers.
7. The Marketing Services group should act as the "customer coordinators". That is, all activity for any customer should be funneled through the appropriate Marketing Services representative to enable one central agency to coordinate and follow-up any implementation. This will provide our customers with a single point of reference for questions, problems, etc., and avoid ambiguity and partial solutions.

The group reports to Stan Yagi, Manager of Services, and consists of Dave Scobie (Supervisor), Bill Gillart, Ron Thompson, AnneMarie Hutchison and John Roth.

The members of the Marketing Services group have accumulated a broad range of experience in all areas of the Computer Centre. We have first-hand experience in all our computers - the 165-II, 155-II, and the 65. We are experienced in Operations, Software Support, Systems Programming, Applications, User Services, IMS, APL, TSO, and many other areas. Where we lack first-hand knowledge of a product, we can interface with the appropriate group within UTCC.

In summary, we are prepared and equiped to deal with any and all of your problems. We are here to provide you with the best solution to your computing problems. Please call me (Dave Scobie - 928-6877), Stan Yagi (928-7331), or any member of the Marketing Services team.

Dave Scobie

Computing.

THE TERMINAL CO-ORDINATOR

Who can help me with my JCL?

What is a Credit Request?

Where can I get documentation on SPSS?

What's a Computing Co-ordinator?

I think I've found a bug with FORTRAN. Who do I contact?

Is TSO a new deodorant or what? How do I find out more about it?

The above questions could be asked by any number of UTCC users. Answers to all of the above questions can be obtained from your Computing Co-ordinator.

This article will explain the function of the Computing Co-ordinator and the interface system which has been established between Computing Co-ordinators and central Computer Centre personnel.

A list of the terminal sites and the Computing Co-ordinators responsible for each location follows:

Marlene Domoney
928-2043

Arts and Science Terminal
Room 2105
Sidney Smith Building
St. George Campus
University of Toronto

Vaughan Lawrason
828-5311

Erindale College
Room 2039
Erindale Campus
University of Toronto

Paul Roth
928-4917

Faculty of Management Studies
Room 219
246 Bloor Street West
St. George Campus
University of Toronto

Clem Di Placido
928-8823

New Physics Terminal
Room 1202
Burton Tower
St. George Campus
University of Toronto

Mark Tapia Advisors
928-7109 928-8599

Sandford Fleming Terminal
Rooms 125, 117
Sandford Fleming Building
St. George Campus
University of Toronto

Ralph Lombardi
284-3173

Scarborough College
Room S624
Scarborough Campus
University of Toronto

In addition, the following personnel, provided by terminal sponsors, are available for operational assistance at the locations indicated.

Kee Ong

Institute for Aerospace Studies
Room 162
Aerospace Studies Building
Dufferin Campus
University of Toronto

cont'd...

THE TERMINAL CO-ORDINATOR Cont'd

Bob Kazluskas

Faculty of Dentistry
Dentistry Building
St. George Campus
University of Toronto

George Ugray

Policy Analysis
Room 109
150 St. George Street
Coachhouse
University of Toronto

John Kornatowski

Zoology Terminal
Ramsey Wright Building
Room 109
St. George Campus
University of Toronto

The Computing Co-ordinator provides assistance and consultation for all UTCC users. Questions concerning availability of languages, packages, documentation and procedures for using each terminal should be directed to the Computing Co-ordinator or designated staff. Questions and problems which cannot be answered will be referred to central site staff. Users need only see the Computing Co-ordinator to solve a problem. All referrals and follow-ups will be handled by the Computing Co-ordinators on behalf of the user.

Computing Co-ordinators cannot be experts in all aspects of computing but there are staff members who are specialists in particular areas of computing. Computing Co-ordinators rely on these staff members for backup support in specific areas. Currently, UTCC has staff members who are specialists in the following areas:

Engineering Applications
Numerical Analysis
Optimization Method Software
Statistical Packages
Graphics Software
TSO
JCL and Utilities
Language Processors (FORTRAN, PL1, ASSEMBLER)
SPEAKEASY

Documentation concerning all aspects of computing on the S/370-165-II is contained in USERBOOK Section 3, which may be obtained from the Information Office, SF128 (928-4990 or 928-4991).

USERBOOK Section 3 is updated frequently to reflect current policy, procedures and software pertaining to the S/370-165-II. All reference material referred to in USERBOOK is available at each terminal. Missing documentation should be brought to the attention of the Computing Co-ordinator.

UTCC endeavors to provide a high quality of service for all users. Occasionally problems do occur: software can be incomplete; hardware can malfunction; staff can make mistakes. The primary means for users to obtain credit for jobs which were not run properly is the UTCC Credit Request. A special form is used to submit a Credit Request. Forms are available at all terminal locations and should be submitted to terminal personnel for approval. Documentation on Credit Request procedures is contained in USERBOOK 3.2300. Credit Requests provide UTCC with a valuable feedback mechanism on all aspects of our service.

cont'd...

THE TERMINAL CO-ORDINATOR Cont'd

Users are also invited to make use of the suggestion procedure and graffiti boards to comment or make suggestions on all aspects of our service. Perhaps the most direct and effective procedure is to make your Computing Co-ordinator aware of your problems or suggestions.

UTCC's main function is to provide computing facilities for the University of Toronto. The Computing Co-ordinator is there to help you use these facilities.

Stan Yagi

COMPUTING IN THE SIDNEY SMITH BUILDING AST/ASUT

The Arts and Science Terminal (AST) is located in room 2105, Sidney Smith Building. The terminal is available on a self-service basis to Service Access – Code holders, with Computer Centre staff on hand in the adjacent room, 2104, to assist with problems.

The remote batch terminal to the IBM 370-165-II is a REMCOM card reader and line printer, with a Univac verifier-interpreter-punch on-line for punched output. Other facilities at AST include keypunches, Backlog display unit, and work tables, as well as up-to-date manuals and documentation and card storage cabinets.

Users who do not hold an Access Code may use the Arts and Science Undergraduate Terminal (ASUT) in room 1073, to submit their programs to the High Speed Job Stream (HSJS). The equipment here consists of an IBM card reader and line printer, as well as keypunches, and in room 1071, work tables and manuals. The facilities are self-service with assistance available in room 2104, when the operator is not present.

The hours of operation at AST and ASUT are currently 1 a.m. - 6 a.m. and 8 a.m. - 10 p.m., Monday to Friday, and 10 a.m. - 6 p.m. on Saturday and Sunday. Advising hours are - weekdays - 9 a.m. - 5 p.m. with extended evening and weekend hours during most of the winter session.

Operational or programming problems, and general enquiries or suggestions, may be referred to the Computing Co-ordinator, Marlene Domoney (928-6509), or the Operator/Advisor, Winston Davis.

Marlene Domoney

WELCOME TO ERINDALE

Erindale Computer Services wishes to welcome back former faculty, staff and students who have been on holidays or just away for the summer, and to extend an invitation to all newly arrived persons at Erindale to stop by the Erindale Computer Centre located in and around Room 2039 of the Main Building.

The central component in this area is a Remcom remote batch terminal which is connected by telephone line to the IBM 370/165-II on the St. George campus. This terminal is capable of providing both High Speed and General Purpose job processing.

Cont'd...

WELCOME TO ERINDALE Cont'd

In addition to the Remcom batch terminal, ten IBM 2741 typewriter terminals are available in Room 2045 for interactive computing, along with twelve keypunches, nine in Room 2039 for regular keypunching, and three in Room 2040 for express keypunching (six cards or less). Ample workspace is provided in Rooms 2046 and 2040, and program advising is offered in Room 2043.

Everyone is encouraged to drop in and meet the Computer Services staff. Muriel Elles, in charge of day-to-day operations, and Vaughan Lawrason, UTCC Computing Co-ordinator, will be glad to answer any questions regarding the facilities and their usage. During most of the fall and winter terms, Computer Services staff are on duty Monday to Thursday from 9:00 to 22:00, Friday 9:00 to 17:00, and 12:00 to 17:00 on Saturday. Keypunches and work areas are available whenever the building is open. All other services are available whenever staff members are present. Check posted schedules for any change in regular or extended hours.

Vaughan Lawrason

ERINDALE COMPUTER SERVICES OPEN HOUSE

The Erindale edition of the UTCC Open House will take place on Tuesday, September 23. Come and see the variety of services that UTCC and Erindale Computer Services have to offer to you, the remote user.

Tours, demonstrations, displays will all help to make it an exciting experience. See a keypunch in action, a 2741 spewing out APL symbols, or better yet, the Remcom 4780 reading a card deck! In addition, the day will be highlighted with special guest appearances by several downtown UTCC staff members who will be presenting sample output from and information about various systems and software packages available at UTCC. Don't forget to check out our multi-media room.

Many other surprises lie in store for the 23rd, so mark it on your calendar now, and be sure to stop in!

Vaughan Lawrason

SCARBOROUGH COLLEGE COMPUTER CENTRE

Scarborough College Computer Centre is presently operating Monday to Friday from 9 AM until 5 PM. Within the next few weeks as usage increases our hours will be extended. We will then be open Monday to Thursday from 9 AM to 10 PM, Friday from 9 AM to 5 PM, and Saturday from 1 PM to 6 PM.

The Computer Centre is equipped with a Remcom 4780 reader printer unit, a Univac 1710 punch (connected to the IBM 370-165-II on the St. George campus) IBM 2741 terminals for APL, ATS, TSO users and IBM 029 keypunches.

During our regular hours there is always an advisor available to assist users with problems or questions.

For additional information, please call Ralph Lombardi at 284-3173.

Ralph Lombardi

NEW PHYSICS TERMINAL

An updated version of the New Physics Terminal has recently been released. Among the newest features of this version are a new Computing Co-ordinator (friendly type), and a new arrangement of existing equipment to make the terminal somewhat more efficient. Many of the old features have been retained and are still being supported, including the previous rule that the terminal is restricted to use by faculty, staff and graduate students only.

The Computing Co-ordinator is available Monday to Friday from 9 a.m. - 5 p.m. in room 1202, Burton Tower.

Clem Di Placido

MINICOMPUTER USERS MEETING

The next monthly MINI USERS Meeting will be held near the end of September. Watch HOTNEWS and COMPUTER BULLETIN BOARDS for details of time and place. This meeting will feature a presentation about communications from mini computer systems to the IBM 370 series, followed by a discussion session. All welcome.

The July meeting dealt with the USERS SURVEY. A summary of the results are presented below.

SUMMARY OF THE USERS SURVEY

Twenty-two survey forms were returned. Most of the respondents used MINIS for DATA ACQUISITION. Graphics and DATA BASE applications were also mentioned. There were six PDP - 11 systems, six PDP - 8 systems, six HEWLETT-PACKARD systems, one DATA GENERAL (NOVA) and one BURROUGHS. Most of the configurations did not have an extensive complement of peripherals. Interfacing to experiments was either home-made or via computer manufacturers' devices. However, CAMAC was used in a few cases. Half the respondents did their own hardware maintenance while the other half had service contracts or used "on call" service. Most people were not interested in a service contract but did want the University of Toronto to offer either on-call service or advice for 'do it yourselfers'.

Most people had some form of operating system on their machine. The following were the popular languages in use: ASSEMBLER - 14 cases, FORTRAN - 6 cases, BASIC-4 cases, ALGOL-2 cases, SUE-2 cases, OTHER-6 cases. All the respondents but one did their own software maintenance. All the respondents but one were interested in the University of Toronto having a central MINI software library or directory. All but four respondents were interested in the possibility of using more sophisticated languages.

A MINI to IBM 370 communications package was very popular with the users providing the running costs were reasonable. A few installations had such a scheme in operation already. Everyone was in favour of the MINI USERS GROUP making suggestions to the University of Toronto regarding MINIS.

cont'd...

MINICOMPUTER USERS MEETING Cont'd

The following were also mentioned as of interest:

- sharing expertise in interconnecting electronic devices
- servicing teletypes
- microprocessors
- networking
- media conversion
- hardware compatibility
- servicing of MAGNETIC tape drives
- a directory of MINI programs
- a directory of MINI users

Any questions regarding this article should be directed to John Rylaarsdam, Geology Department (928-5177), or John Kornatowski, Zoology Department (928-5303).

John Rylaarsdam John Kornatowski

PERSONNEL CHANGES

Leaving the Centre this month are Terry Wood, Bassey Akpan and AnneMarie Hutchison. Terry of Systems is leaving the "big city" to accept a position with Queen's University and Bassey of the keypunching section is returning to University to complete a degree programme. AnneMarie of Marketing is joining a stock brokers firm. On behalf of the Centre, best wishes to you all and good luck in your new endeavours.

A welcome is extended to Gloria Smith, Mark Acfield and Michael Wagner. Gloria who hails from Woodstock has recently joined the Centre as a keypunch operator in the Applications Support area. Michael has been a part-time program adviser with the Centre since last fall and Mark has been a part-time programmer with the Centre for the past two years. Both are now on full time staff as programmers. On behalf of the Centre, I hope you find your new position agreeable and enjoy working with us.

T.A. Holland

RECENT ACQUISITIONS IN THE DEPARTMENT OF COMPUTER SCIENCE LIBRARY

Canadian Computer Census. 1974.

Conway, R. and Gries, D.
An Introduction to Programming: A Structured Approach Using PL/1 and PL/C-7. 2d ed.
Cambridge, Mass., Winthrop, 1975.

DPI-CIPS Conference 74.
Proceedings.
Ottawa, June 1974.

Dixon, W.J. and Nicholson, W.L., eds.
Exploring Data Analysis: The Computer Revolution in Statistics.

EDUCOM.
Computing and the Decision Makers: Where Does Computing Fit in Institutional Priorities?
Princeton, N.J., 1974.

IFIP Working Conference on Machine Oriented Higher Level Languages, Trondheim, 1973.
Machine Oriented Higher Level Languages, ed. by W.L. van der Poel and L.A. Maarssen.
Amsterdam, North-Holland, 1974.

Cont'd...

RECENT ACQUISITIONS Cont'd

International Conference on Economics
of Informatics, Mainz, 1974.
Economics of Informatics, ed. by
A.B. Frielink.
Amsterdam, North-Holland, 1975.

Katzan, Harry, Jr.
Computer Data Management and Data
Base Technology.
New York, Van Nostrand Reinhold, 1975.

Michie, Donald.
On Machine Intelligence.
Edinburgh, University Press, 1974.

Tou, Julius T. and Gonzalez, R.C.
Pattern Recognition Principles.
Reading, Mass., Addison-Wesley, 1974.

SANDFORD FLEMING TERMINAL NEWS

The Sandford Fleming Terminal has introduced a smaller format of printer paper and a smaller type face as the default standard form. The standard form is 8 1/2" deep by 15" wide (21.6 cm x 38.1 cm) with an 8 line per inch carriage control tape and a smaller PN print train. All jobs routed to this terminal will be printed on this form by default.

This format has several advantages for the user:

1. It is more compact and easier to handle.
2. Copies of printouts can be produced on photocopying machines without photoreduction, since the printed area is smaller than legal size paper (8 1/2 x 14).
3. Up to 68 lines can be produced on a page compared to 66 lines for the current standard sized form.

The two High Speed Job Stream terminals, ASUT and EUT, also have the smaller sized paper and it will also become the default at AST on September 8th. The old standard size of PN train is no longer available at the Sandford Fleming Terminal and a forms mount charge is required for all output produced on 11" x 15'' lined paper.

A USERBOOK update has been issued detailing all of the changes in the forms setup.

Mark Tapia

SFT/EUT ADVISING

The current 10 a.m. - 5 p.m. advising hours will again be extended for the winter term. The new hours

10am - 8pm Monday to Thursday
10am - 5pm Friday
12pm - 5pm Saturday, Sunday

will be in effect from 22 September to 7 December, 1975 and 12 January to 9 April, 1976. The advisors will assist with all programming and operational problems.

Mark Tapia

AST/ASUT ADVISING

The current 9 a.m. - 5 p.m. advising hours will again be extended for the winter term. The new hours

9am - 8pm Monday to Thursday
9am - 5pm Friday
12pm- 5pm Saturday,Sunday

will be in effect from 22 September to 7 December, 1975 and 12 January to 9 April, 1976. The advisors will assist with all programming and operational problems.

Marlene Domoney

PRINTER SETUP AT AST

On September 8th, at 9.00 a.m. the printer setup at the Arts and Science Terminal will be changed to conform with the recent change at the Sandford Fleming Terminal. The new form will be 8 1/2" deep by 15" wide with an 8 line per inch carriage control tape. Users are reminded that since the same number of lines will be printed per page, most programs will require no changes.

Marlene Domoney

SPSS VERSION 6

SPSS Version 6 has been available for use at the University of Toronto Computer Centre for approximately 2 1/2 months. News of its existence here has heretofore been passed by word of mouth, due to the uncertainness of supply of manuals. A strike (now over) at McGraw-Hill in Toronto, had delayed an order for manuals that the Information Office had placed with them. In addition, a second printing has been necessitated by the demand for manuals. The new manual is titled STATISTICAL Package for the Social Sciences, Second Edition.

The new manual is a necessity for users of SPSS Version 6. In addition to the usual number of additional commands found in successive versions of the SPSS system, some data setup commands have changed (# of cases is now N of cases), many of the old statistical procedure call formats have been changed and some command procedure names are no longer recognized as valid (examples of the latter are CODEBOOK, FASTMARG, AND MARGINALS whose capabilities are subsumed by the new procedure, FREQUENCIES).

Highlighting the statistical enhancements is the addition of ANOVA, a subprogram that performs analysis of variance for factorial designs allowing up to 5 factors in each design, and which yields an MCA output (Multiple Classification Analysis). Users can specify the order in which covariates and factors enter into the analyses and hence can produce analyses that conform to classical, hierarchical, or regression analyses of variance. CANCORR, AGGREGATE and DISCRIMINANT have been redesigned and rewritten.

Data definition commands now include a DATA LIST card that allows the use of direct column specification for declaration of variables.

SPSS Version 6 is easily accessed if (a) you have access to a copy of the SPSS, second edition manual and (b) by including a VERSION=V600 parameter on any of the 3 supported UTCC catalogued procedures.

```
(i.e.  // EXEC SPSS,VERSION=V600)
```

For an interim period of months, SPSS Version 5 will remain the default version accessed; Version 6 of SPSS will then become the default version accessed, although Version 5 will also be available.

Manuals should shortly be available in the Information Office, Sandford Fleming Building, Room 128.

Len Prepas

BMD NEWS

An updated library of programs corresponding to the 1973 Blue BMD manual of programs is now available. To access these routines, just add the following card to each of the existing UTCC BMD catalogued procedures immediately after the // EXEC card in each procedure.

```
//steplib DD DSN=APPL.STATLIB,DISP=SHR
```

Users should note that this library of programs uses the naming conventions found in the 1973 Blue BMD manual and hence when specifying a particular BMD routine on the // EXEC card make sure to use the new name (i.e. the x-series of programs were amalgamated into the old BMD series with resulting name changes. In addition some old routines no longer exist in this new library).

The old library of programs will remain the default version accessed for a period of one month, after which time the new library of BMD modules will become, by default, the library accessed by UTCC catalogued procedures.

Len Prepas

BMDP NEWS

The BMDP series of programs are now available for use at the University of Toronto. These routines represent the most complete and newest portion of the programs distributed by the Health Sciences Computing Facility attached to the University of California, Los Angeles. Among the routines available are: BMDP3D which allows for T-Tests and a HOTELLING'S T^2 ; BMDP8D, missing value correlation analysis; and BMDP1M, BMDP2M, BMDP3M, 3 cluster analysis routines. The BMDP routines are standalone routines (as are the BMD series generally). However, a freer form parameter language input is now used in place of strict column specific control cards used in the older BMD series.

Two new procedures are required to access the P-series of programs. They are:

```
// JOB card (ordinary S/370 Job card)
// EXEC STATP,PROG=BMDPXX
//STAT.SYSIN DD *

  BMDP parameter control cards
        and data

/*
```

where: BMDPXX is replaced by the actual name of the BMDP routine used (i.e. BMDP3M for the BLOCK CLUSTERING Routine).

This procedure will allow access to all those BMDP routines that do not require the input of problem specific FORTRAN subprograms. For those routines that require the user to specify explicitly the form of the function or parameters he is dealing with, the following procedure should be used.

```
// JOB card (as before)
// EXEC STATPOPN,PROG=BMDPXX
//FORT.SYSIN DD *

  FORTRAN subprograms

/*
//LKED.SYSIN DD *
   INCLUDE STATO(BMDPXX)
   ENTRY MAIN
/*
//STAT.SYSIN DD *

   BMDP parameter cards
        and data
/*
```

cont'd.

BMDP NEWS Cont'd.

where: BMDPXX is (as before) to be replaced by the actual name of the BMDP routine used (i.e. BMDP3R - Nonlinear Regression).

A new manual, explicitly for use with the BMDP series is now available in limited quantities from the Information Office. Copies can also be ordered through the Information Office, SF128.

Len Prepas

TEXT PROCESSING AND THE IBM SORT PROGRAM

Many users of the SORT/MERGE program package are not aware of the value of the SORT Exits provided by this routine. These allow the user to write his own code to perform many functions that the SORT/MERGE program or the user's application program would normally do. For example, in generating text in a high-level language for later sorting, the user must at some point translate the field to be sorted to either all upper case or all lower case so that it will sort correctly. Otherwise, 'And in' will sort after 'and therefore', which is incorrect since 'i' normally comes before 't'.

I encountered this problem recently, and initially used the following solution: duplicate the sort field at the end of the record and translate this 'extra' copy of the field in the SPITBOL program which generates the SORT input. This consumed enormous amounts of CPU time. PL/1 would be a little less wasteful, but the application was already written in SPITBOL.

Realizing that the translation process can be accomplished by a single machine instruction, I resolved to write an Assembly-language routine to do the translation. Rather than have a separate job step devoted exclusively to the translation process, I decided to use a SORT Exit. I could have used a SPITBOL function in Assembler, but the SORT Exit gave the added advantage that the 'extra' field could be dropped from the record, reducing I/O transfer and disk space. The record size (LRECL) could be dropped from 191 to 133, a saving of 30%. The routine I wrote is, in fact, completely general, and has been installed in a system library so that anyone can use it. The following example shows it use:

```
    SORT  FIELDS=(1,20,CH,E)
    EXITS EG1=(UPCASE61,450,EXITLIB,N)
//EXITLIB  DD  DISP=SHR,DSN=UTIL.TXTPLMOD
```

Users wishing any character-data sort field translated to upper case may use this routine by simply changing the start and length values in the FIELDS parameter. The other parameters, as well as descriptions of the various exit points and their parameters, are contained in the SORT/MERGE programmer's guide, SC33-4007-3.

Users with other generalized SORT Exits are invited to contribute these to UTCC for publication and general use. Comments and suggestions should be directed to Ian Darwin, 49 St. George St. Room 303, 928-7318.

Ian Darwin

TSO TOPICS: EXTENDED JOB STATUS

In reply to requests from several users, UTCC has implemented an extended STATUS command for RJE jobs. This command, named STE, can only be used for a single job and only when the jobname is known. STE returns the job number, the user name (only the first eight characters), the job status (i.e. AWAITING XEQ, PRINTING, etc.) and the priority. If the job has finished executing, the number of lines and cards generated will be listed as well as the number of steps which executed. If the keyword CODES is entered, the program will try to find all system messages of the form 'STEP WAS EXECUTED - COND CODE xxx', 'STEP xxx ABEND', etc., and print these messages to the terminal. If a user has inadvertently run two jobs with the same jobname, STE will display the first one it finds. To display any other one, the user must find the job <u>number</u> in the usual way (with ST) and then use the JOB(xxx) form of STE. For example,

```
STE TS12345A JOB(576) CODES
```

The information provided is primarily useful in determining whether a job succeeded or failed. Please note that the format of the command and of the output is very much subject to change in future versions of the command, the operating system and/or HASP. Users should not become overly dependent upon this command as it is subject to change.

Any suggestions or problems should be directed to the Computing Co-ordinator or to Ian Darwin, 49 St. George St., Room 303, 928-7318.

Ian Darwin

CORRECTION TO COMPUTERNEWS ARTICLE - SPEAKEASY SESSIONS -GRAPHEASY

In the newsletter article, SPEAKEASY SESSIONS -GRAPHEASY on Page 5 of July COMPUTERNEWS, the second last line of the program in column 1 should read:

```
VSCALE=-1,1 etc.
```

<u>not</u>

```
Gvscale=-1,1 etc.
```

We apologize for any inconvenience this may have caused.

Ian Darwin

HSJS MONTHLY STATISTICS

During the month of July, 1975, 78,478 jobs were processed compared with 63,889 for the previous year, an increase of 22.8%.

The following charts summarize the HSJS activity for the month of July. The graph represents the average number of jobs processed during each half hour period of the day.

Mark Tapia

```
ALL TERMINALS                                         JOB VOLUME FOR 02/07/75 - 31/07/75
CLASS = W                                                 (AVERAGE OVER 29 DAYS)

                                                  # JOBS WHICH BEGAN EXECUTION AT INDICATED TIME
                                    25   50   75  100  125  150  175  200  225  250  275  300  325  350  375  400  425  450  475  500
                      |#JOBS|TOD|----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
                      |    0|   |
PROCESSOR #USES    %  |    0|   |
WATFIV     40385 (51) |    9|  1|6
PL/C       28556 (36) |   12|   |66
UTILITY     3516 ( 4) |   10|  2|66
ASMG        1986 ( 2) |   10|   |66
OTHER*      1604 ( 2) |    8|  3|6
SPITBOL     1047 ( 1) |    8|   |6
ALGOLW       605 ( 0) |    7|  4|6
WATBOL       553 ( 0) |    3|   |
PLUTO         96 ( 0) |    4|  5|
SIMON         58 ( 0) |    4|   |
LISP          55 ( 0) |    0|  6|
OTHER          0 ( 0) |    0|   |
                      |    0|  7|
                      |    0|   |
                      |    8|  8|6
                      |   19|   |666
                      |   35|  9|6666666
                      |   54|   |6666666666
                      |   72| 10|66666666666666
                      |   82|   |6666666666666666
                      |   99| 11|6666666666666666666
                      |  108|   |666666666666666666666
                      |  119| 12|66666666666666666666666
                      |  111|   |6666666666666666666666
                      |  108| 13|666666666666666666666
                      |  124|   |666666666666666666666666
                      |  130| 14|66666666666666666666666666
                      |  145|   |66666666666666666666666666666
                      |  155| 15|6666666666666666666666666666666
                      |  149|   |66666666666666666666666666666
                      |  152| 16|666666666666666666666666666666
                      |  140|   |6666666666666666666666666666
                      |  121| 17|666666666666666666666666
                      |  108|   |666666666666666666666
                      |   77| 18|666666666666666
                      |   74|   |66666666666666
                      |   68| 19|6666666666666
                      |   69|   |6666666666666
                      |   70| 20|66666666666666
                      |   70|   |66666666666666
                      |   73| 21|66666666666666
                      |   69|   |6666666666666
SHIFT   #JOBS         |    1| 22|
0 - 8    2405         |    0|   |
8 - 4   44220         |    0| 23|
4 - 12  31853         |    0|   |
                       2706|   | 8-SERVICE FACTOR(2.0) || 6-SERVICE FACTOR(1.0) || 4-SERVICE FACTOR(.75)

TOTAL JOBS AT SF .75 (UNAVERAGED)      0   * SP/K, SPSSQ and SNAP
TOTAL JOBS AT SF 1.0 (UNAVERAGED)  78478
TOTAL JOBS AT SF 2.0 (UNAVERAGED)      0
TOTAL JOBS AT ALL SF (UNAVERAGED)  78478
```

```
RESOURCE USAGE BY PROCESSOR

                            ||      TOTAL PER PROCESSOR          ||     AVERAGE PER USE       |
                            ||   CPU   |  #CARDS  |   #LINES     ||  CPU  |#CARDS |  #LINES  |
PROCESSOR | #USES  %TOTAL   ||  (MIN)  |   READ   |   PRINTED    || (MIN) | READ  |  PRINTED |
---------------------------------------------------------------------------------------------
WATFIV    | 40385   (51)    ||  692.24 |  9448401 |   8562047    || 0.016 |  232  |    212   |
PL/C      | 28556   (36)    ||  307.49 |  3062010 |   5270595    || 0.008 |  104  |    184   |
UTILITY   |  3516   ( 4)    ||   13.06 |   754332 |    824251    || 0.000 |  212  |    232   |
ASMG      |  1986   ( 3)    ||   21.31 |   210135 |    301261    || 0.008 |  104  |    148   |
OTHER*    |  1604   ( 2)    ||   22.76 |   173824 |    251094    || 0.012 |  108  |    156   |
SPITBOL   |  1047   ( 1)    ||   11.42 |   187785 |    198260    || 0.008 |  176  |    188   |
ALGOLW    |   605   ( 1)    ||   18.72 |   138655 |    154648    || 0.027 |  228  |    252   |
WATBOL    |   553   ( 1)    ||    9.98 |   158770 |    177899    || 0.016 |  284  |    320   |
PLUTO     |    96   ( 0)    ||    0.83 |     6609 |     13680    || 0.008 |   68  |    140   |
SIMON     |    58   ( 0)    ||    0.15 |     1093 |      2944    || 0.000 |   16  |     48   |
LISP      |    55   ( 0)    ||    0.40 |     3968 |      6866    || 0.004 |   72  |    124   |
ASSIST    |    17   ( 0)    ||    0.10 |     2985 |      4936    || 0.004 |  172  |    288   |
---------------------------------------------------------------------------------------------
TOTAL       78478           || 1098.46 | 14148567 |  15768481    || 0.014 |  180  |    200   |

* SP/K, SPSSQ and SNAP
```

S/370-165-II RELIABILITY

The reliability statistics for July indicate an uptime percentage of 95.2 while the average number of IPL's per day reached 1.23. The number of scheduled hours of production for July totalled 482.

MONTHLY COMPARATIVE FIGURES

MONTH	% UPTIME	UNSCHED. IPLs/DAY
Jan/74	97.0	1.37
Feb/74	98.3	1.25
Mar/74	98.7	1.06
Apr/74	99.3	0.52
May/74	99.2	0.87
Jun/74	96.1	0.75
Jul/74	91.7	1.66
Aug/74	98.3	0.86
Sep/74	94.5	1.83
Oct/74	98.6	1.07
Nov/74	98.9	0.93
Dec/74	97.1	1.21
Jan/75	95.7	2.77
Feb/75	96.0	1.14
Mar/75	96.7	1.10
Apr/75	98.6	0.70
May/75	99.4	0.60
Jun/75	97.4	0.79
Jul/75	95.2	1.23

The percentage breakdown of total system downtime for July was:

Hardware: 1193 minutes (86.1%)
Software: 148 minutes (10.7%)
Other : 44 minutes (3.2%)

The major events contributing to these downtime totals were as follows:

July 8 - 91 minutes - 2 IPLs

(a) 10 minutes attributed to an ITEL disk drive malfunction. An IPL was required to swap the mounted system volume to another drive.

(b) 81 minutes charged to corrective software maintenance after a number of members were scratched from SYS1.LINKLIB.

July 25 - 745 minutes down - 4 IPLs

(a) All time due to IBM corrective maintenance on the /165 CPU. Numerous "E" unit checks were experienced which were caused by parallel adder full sum and carry errors. No concrete solution was found, but the problem was bypassed by running the system in positive bias.

July 28 - 116 minutes down - 12 IPLs

(a) All time attributed to continuing problems in the /165 CPU. IBM corrective maintenance was being performed.

July 29 - 332 minutes down - 4 IPLs

(a) 300 minutes due to continuing IBM corrective maintenance on the /165 CPU. The problem was finally traced to a poorly grounded tri-lead which was re-seated and one defective card which was replaced. Total downtime for this problem amounted to 1161 minutes.

(b) 15 minutes charged to two supervisor loops in O.S.

(c) 10 minutes attributed to an O.S. bug which was routing jobs to be executed into the class=H jobqueue.

(d) 7 minutes for an IPL to bring O.I.S.E. online.

Paul Scarborough

```
                                   [illegible]

-------------------------------------------------------------------------------------------------------------------------
|                                                  TIME OF DAY (HOURS)                                                  .|
| DAY  RELOADS DNTIME  0   1   2   3   4   5   6   7   8   9   10  11  12  13  14  15  16  17  18  19  20  21  22  23  24|
=======================+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+-|
| T  1 (CENTER CLOSED) |
| W  2     1      10   |
| T  3     1       7   |                                    S
| F  4     1       5   |                                                                     H
| S  5     0       0   |
| S  6     0       0   |
| M  7     1       5   |                                      O
| T  8     2      91   |                                                             H               SSSSSS
| W  9     1       9   |                                                                       S
| T 10     2      12   |                                                        S                   O
| F 11     0       0   |
| S 12     0       0   |
| S 13     0       0   |
| M 14     0       0   |
| T 15     0       0   |
| W 16     2      14   |                                                S               S
| T 17     0       0   |
| F 18     0       0   |
| S 19     0       0   |
| S 20     1       5   |                                         H
| M 21     1       5   |                                          S
| T 22     0       0   |
| W 23     0       0   |
| T 24     2      17   |     I                                    S      H
| F 25     4     745   |     HHHHHHHHHHHHHHHHHHH        HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH
| S 26     1       5   |                                                                     H
| S 27     1       5   |                                           H
| M 28    12     116   |     H     H   HH     HH        H       H                  H          H       H    H  HH
| T 29     4     332   |    HHHHHHHHHHHHHHHHHHHH                 S   O      S         S
| W 30     0       0   |
| T 31     0       2   |                                I
-------------------------------------------------------------------------------------------------------------------------
LEGEND :     H FOR HARDWARE
             S FOR SOFTWARE                    STATISTICS
             O FOR OPERATIONAL
             U FOR UNEXPLAINED
             I FOR LATE IPL
                                       TOTAL SCHEDULED HOURS OF PRODUCTION :  482
                                       TOTAL DOWNTIME (MN)   : 1385 , AVG/DAY :   46.17 , AVG/PROD HOUR :   1.44
                                       TOTAL REIPL'S         :   37 , AVG/DAY :    1.23
                                       DOWNTIME RATE IS      :  4.79 PERCENT OF SCHEDULED PRODUCTION HOURS
```

```
                                 [illegible]

---------------------------------------------------------------------------------------------------------------------------
|                                                 REIPLS(FREQ) // DOWNTIME (MN)                                            |
| DAY  REIPL  DNTIME 0    5    10   15   20   25   30   35   40   45   50   55   60   65   70   75   80   85   90   95   100|
=====================+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+|
| T  1 (CENTER CLOSED)|
| W  2     1      10 |H•••••••••
| T  3     1       7 |H••••••
| F  4     1       5 |S••••
| S  5     0       0 |
| S  6     0       0 |
| M  7     1       5 |H••••
| T  8     2      91 |SS•••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••
| W  9     1       9 |H••••••••
| T 10     2      12 |SS••••••••••
| F 11     0       0 |
| S 12     0       0 |
| S 13     0       0 |
| M 14     0       0 |
| T 15     0       0 |
| W 16     2      14 |SS••••••••••••
| T 17     0       0 |
| F 18     0       0 |
| S 19     0       0 |
| S 20     1       5 |H••••
| M 21     1       5 |S••••
| T 22     0       0 |
| W 23     0       0 |
| T 24     2      17 |HH•••••••••••••••
| F 25     4     745 |HHHH•••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••• 745 |
| S 26     1       5 |H••••
| S 27     1       5 |H••••
| M 28    12     116 |HHHHHHHHHHHH•••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••• 116 |
| T 29     4     332 |HHHH•••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••• 332 |
| W 30     0       0 |
| T 31     0       2 |••
---------------------------------------------------------------------------------------------------------------------------

LEGEND       : ONE C  •ONE REIPL
               ONE •  •ONE MINUTE OF DOWNTIME
```

```
DATE  : 01/07/75 - 31/07/75

                        S/370 RELIABILITY REPORT

SYSTEM DOWN TIME:TOTAL         ..........   2210 MN    5.1 o/o
                                           --------------------
DURING SCHEDULED UPTIME:TOTAL    1385 MN    3.2 o/o
  -UNSCHED.IPL'S                  253 MN    0.6 o/o
  -COR. MAINT. :-SOFTWARE          75 MN    0.2 o/o
               -IBM              1045 MN    2.4 o/o
               -ITEL                0 MN    0.0 o/o
               -AIR COND.           0 MN    0.0 o/o
  -UNOPERATIONAL                    0 MN    0.0 o/o
  -DUE TO DELAYED IPL'S            12 MN    0.0 o/o
DURING UNSCHED. UPTIME:TOTAL      825 MN    1.9 o/o
  -UNSCHED.IPL'S                   10 MN    0.0 o/o
  -COR. MAINT. :-SOFTWARE           0 MN    0.0 o/o
               -IBM               815 MN    1.9 o/o
               -ITEL                0 MN    0.0 o/o
               -AIR COND.           0 MN    0.0 o/o
  -UNOPERATIONAL                    0 MN    0.0 o/o


SYSTEM PRODUCTION TIME         ..........  28428 MN   65.8 o/o
                                           --------------------

SCHEDULED PRODUCTION            27515 MN   63.7 o/o
UNSCHEDULED PRODUCTION            913 MN    2.1 o/o


SYSTEM MAINTENANCE TIME:TOTAL  ..........   8711 MN   20.2 o/o
                                           --------------------
  -SOFT. TEST TIME               7456 MN   17.3 o/o
  -PREV. MAINT.:-IBM              853 MN    2.0 o/o
               -ITEL              400 MN    0.9 o/o
               -AIR COND.           0 MN    0.0 o/o


SYSTEM IDLE TIME               ..........   3430 MN    7.9 o/o
                                           --------------------

SCHEDULED_IPL'S:TOTAL          ..........    264 MN    0.6 o/o
                                           --------------------

No OF UNSCHEDULED IPL'S : ..............      37         1.23/DAY

No OF DAYS : CENTER CLOSED DOWN : ......       1
```

INTERACTIVE SYSTEMS RELIABILITY

The reliability statistics for the month of July indicated a near record month as far as the uptime performance is concerned. The uptimes achieved for the month of July for each of APL and ATS were 99.89% and 99.93% of scheduled operation, respectively. The number of scheduled hours of operation during the month of July totalled 493, while the number of unscheduled IPL's per day was 0.03. In addition to the scheduled time, Interactive Services were also available for approximately 119 hours of unattended weekend operation.

The percentage breakdown of total system downtime for July was: Hardware - 20 minutes (100%). One unscheduled IPL was required and the event contributing to subsequent downtime was as follows:

July 29: 20 mins. of downtime was attributed to an interface control check. IBM was able to rectify the problem by replacing a suspected relay card in the 3705 communications controller.

The following table summarizes the time lost out of scheduled hours of production due to system failures for each of the systems.

Kam Jain

DATE	DOWNTIME (mins)		REASON
	APL	ATS	
Mon. July 21	14	-	Retrieved WS-Professor Berkowitz
Tue. July 29	20	22	*Interface control check (HARDWARE)
Total	34	22	*IPL Required

System Failures July 1 to July 31, 1975

CHANGES IN HOURS OF SERVICE - 360-65

Effective Tuesday, September 2, 1975, hours of service for all Interactive Services will be changed to:

	*
Monday - Friday	0:00 to 4:00 hours
	9:00 to 24:00 hours
Saturday, Sunday	9:00 to 17:00 hours

* The change in hours is to allow for extended system maintenance. Users should note, however, that on Tuesdays and Wednesdays the system may be available until 4:30 or 5:00 hours. To check the status of the system, users should check the sign-on message or call the operator at 928-7107.

Kam Jain

```
                         __S/65__DOWNTIMES_DURING_JUL_75


-------------------------------------------------------------------------------------------------------------------------
|                                                              TIME OF DAY (HOURS)                                      |
| DAY   RELOADS DNTIME 0   1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24|
=======================+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+|
| W  2       0     0   |                                                                                                |
| T  3       0     0   |                                                                                                |
| F  4       0     0   |                                                                                                |
| S  5       0     0   |                                                                                                |
| S  6       0     0   |                                                                                                |
| M  7       0     0   |                                                                                                |
| T  8       0     0   |                                                                                                |
| W  9       0     0   |                                                                                                |
| T 10       0     0   |                                                                                                |
| F 11       0     0   |                                                                                                |
| S 12       0     0   |                                                                                                |
| S 13       0     0   |                                                                                                |
| M 14       0     0   |                                                                                                |
| T 15       0     0   |                                                                                                |
| W 16       0     0   |                                                                                                |
| T 17       0     0   |                                                                                                |
| F 18       0     0   |                                                                                                |
| S 19       0     0   |                                                                                                |
| S 20       0     0   |                                                                                                |
| M 21       0     0   |                                                                                                |
| T 22       0     0   |                                                                                                |
| W 23       0     0   |                                                                                                |
| T 24       0     0   |                                                                                                |
| F 25       0     0   |                                                                                                |
| S 26       0     0   |                                                                                                |
| S 27       0     0   |                                                                                                |
| M 28       0     0   |                                                                                                |
| T 29       1    20   |                                                            H                                   |
| W 30       0     0   |                                                                                                |
| T 31       0     0   |                                                                                                |
-------------------------------------------------------------------------------------------------------------------------
LEGEND :    H FOR HARDWARE
            S FOR SOFTWARE                  STATISTICS
            O FOR OPERATIONAL
            U FOR UNEXPLAINED
            I FOR LATE IPL
                                        TOTAL SCHEDULED HOURS OF PRODUCTION :  493
                                        TOTAL DOWNTIME (MN)   :   20 , AVG/DAY :   0.67 , AVG/PROD HOUR :   0.02
                                        TOTAL REIPL'S         :    1 , AVG/DAY :   0.03
                                        DOWNTIME RATE IS      :  0.07 PERCENT OF SCHEDULED PRODUCTION HOURS
```

```
                         DOWNTIME_REPORT_ON____S/65__FOR_JUL_75


---------------------------------------------------------------------------------------------------------------------------
|                                                  REIPLS(FREQ) // DOWNTIME (MN)                                           |
| DAY  REIPL   DNTIME 0    5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80   85   90   95  100|
======================+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+|
| W  2     0       0  |                                                                                                    |
| T  3     0       0  |                                                                                                    |
| F  4     0       0  |                                                                                                    |
| S  5     0       0  |                                                                                                    |
| S  6     0       0  |                                                                                                    |
| M  7     0       0  |                                                                                                    |
| T  8     0       0  |                                                                                                    |
| W  9     0       0  |                                                                                                    |
| T 10     0       0  |                                                                                                    |
| F 11     0       0  |                                                                                                    |
| S 12     0       0  |                                                                                                    |
| S 13     0       0  |                                                                                                    |
| M 14     0       0  |                                                                                                    |
| T 15     0       0  |                                                                                                    |
| W 16     0       0  |                                                                                                    |
| T 17     0       0  |                                                                                                    |
| F 18     0       0  |                                                                                                    |
| S 19     0       0  |                                                                                                    |
| S 20     0       0  |                                                                                                    |
| M 21     0       0  |                                                                                                    |
| T 22     0       0  |                                                                                                    |
| W 23     0       0  |                                                                                                    |
| T 24     0       0  |                                                                                                    |
| F 25     0       0  |                                                                                                    |
| S 26     0       0  |                                                                                                    |
| S 27     0       0  |                                                                                                    |
| M 28     0       0  |                                                                                                    |
| T 29     1      20  |O********************                                                                               |
| W 30     0       0  |                                                                                                    |
| T 31     0       0  |                                                                                                    |
---------------------------------------------------------------------------------------------------------------------------


 LEGEND      : ONE O  =ONE REIPL
               ONE *  =ONE MINUTE OF DOWNTIME
```

COMPUTER REASEARCH FACILITY OPEN HOUSE

The Computer Research Facility will be taking part in this year's Open House and will be giving demonstrations of the following unique CRF services:

- computer portraits, from TV camera to line printer in 60 seconds. These are available for $5.00 each.
- interactive graphical curve fitting
- computer generated movies to be shown directly on the computer's graphical display devices.
- demonstrations of real time acquistion of analog data, and processing of that data.

CRF provides these and related services using a number of PDP-11 minicomputers and peripherals. These systems allow program development in Assembler language or FORTRAN and provide graphical output for easier user interaction. The CRF facilities are available to anyone with a UTCC account number. For further information, contact the CRF Lab Co-ordinator, K. C. Patnaik, at 928-8858.

Krishna Patnaik

WELCOME TO DATATALK

DATATALK: Good morning, DATATALK services.
C: Hello, DATATALK?
D: Yes. Good morning.
C: What in the world is DATATALK?

University of Toronto DATATALK is a computer service offered by UTCC at no charge for casual enquiry and problem solving over the telephone.

It is available to anyone within the University of Toronto community and has no prerequisite for its use.

We do:

Arithmetic you might have done on a desk calculator, loan schedules and other financial calculations, numerical integration, function tabulation and simple sketch plots, solutions to equations, curve fitting, multiple linear regression ... and a whole lot more.

We solve problems and, whenever possible, return the solution during telephone conversation. A hard-copy printout of the calculation may be conveniently forwarded to you at your campus mailing address.

DATATALK services are available 10 a.m. - 10 p.m. Monday through Friday. Just dial 928-6710 to get in touch with us.

....

APL INFORMATION AND ADVISORY SERVICES

University of Toronto DATATALK is your nearest resource for APL programming advice and for information on the programs supported by UTCC in the APL public libraries.

Call us at 928-6710 for an immediate answer to your query, or visit us at our office, room 205, 49 St. George Street, 10 a.m. - 10 p.m., Monday through Friday.

DATATALK PUBLICATIONS

Available without charge at the UTCC Information Office, or from DATATALK.

1. University of Toronto DATATALK brochure, with attached blue and white DATATALK telephone sticker

and for the APL programmer

2. DATATALK Pocket Guide to APL Transmission Codes and Dyadic I-Beams, (August, 1974)
3. DATATALK Pocket Guide to ΔFD/ΔWS and APL4, (January, 1975).

……

DATATALK DIALOGUES

Each month in this newsletter, University of Toronto DATATALK features dialogues drawn from actual and simulated DATATALK conversational computing experiences.

We include dialogues in the hope that examples of how much can actually be done by computer during a telephone conversation will encourage you to find new and even better ways in which DATATALK can assist you in getting your work done.

Here's a sampler drawn from past issues of COMPUTERNEWS that may serve as the briefest of introductions to DATATALK services.

Please call us with your problem.

DATATALK: Good morning, DATATALK services.
C: Hi. What's $240 worth at 8 1/2 per cent compounded semi-annually in ten years?
D: That's $551.74.
C: Actually, you know, it might be more useful for me to know the factor involved.
D: Yes. It's about 2.3.

……

DATATALK DIALOGUES Cont'd

C: Can you estimate solutions to simple linear equations?

D: Yes. Usually, there is no difficulty there. Could I have the equations, please?

C: $0.6X + 0.3Y + 1.2Z = 2.97$

$X + Y + 2.5Z = 7.0$

and $1.2X + 1.5Y + 2.7Z = 9.63$. That's all.

D: Then the solution is ...$X=2.9$, $Y=4.1$ and $Z=0$.

C: Oh. I didn't expect that Z would be zero.

....

DATATALK: Good morning, DATATALK services.

C: Hi. Would you estimate that zero of X minus TAN(X) is between 1 and 3/2 PI?

D: It's approximately 4.4934.

....

DATATALK: Good morning, DATATALK services.

C: Hello. Would you do a per cent breakdown for a few raw scores that I have?

D: Yes, of course.

C: I prefer them in ascending order. The scores are 16 11 12 21 17 18.

D: And then the per cents are 11.58 12.63 16.84 17.89 18.95 and 22.11.

C: Thank you. What's the total, by the way...?

....

DATATALK: Good morning, DATATALK services.

C: Hello. Can you calculate the CHI-squared statistic for a 2x2 table?

D: Yes.

C: Good. The table is 30/187 and 19/165, so that I have 30 observations of the one and...157 of the other, and so on.

D: The CHI-squared is 1.5, or 1.4996, if you like.

C: Oh. That's rather low. I have another...

....

DATATALK: Good morning, DATATALK services.

C: Would you do the integral of two plus one divided by X minus one between two and ten for me, please?

D: Fine. I used a Gaussian Quadrature on 12 and 24 points... so the estimate is 12.0558.

DATATALK DIALOGUES Cont'd.

DATATALK: Good morning, DATATALK services.
C: Good morning. I'd like to have some sample statistics for the data 8.8 11.87 7.8 11.47 8.87 12.53 8.6 12.47 7.93.
D: Yes.
C: In particular, the Mean is?
D: 10.04.
C: And the Standard Deviation?
D: 1.998.
C: How many Standard Deviations in the range?
D: Well, the range is 4.73 between the lowest and the highest, so that's about 2.4 standard deviations there.
C: And also...

....

DATATALK: Good morning, DATATALK Services.
C: Hi. If I gave the sample statistics from several sets of data, would you calculate the standard T-test for me?
D: Yes, we could do that.
C: Right, then...

UTCC COMPUTER EQUIPMENT

SYSTEM/370 MODEL 165-II

- located in SF103/105/112
- provides General Purpose Job Stream, High Speed Job Stream, ~~and~~ TSO ~~services~~ and APLSV services
- 3072K bytes of memory
- 1 drum
- 13 disk drives (3330)
- 8 disk drives (2314)
- 6 magnetic tape drives (4 9-track and 2 7-track)
- 6 display consoles
- 6 printers
- 5 card readers
- 1 card punch
- 8 remote batch terminals
- 1 paper tape reader
- Calcomp plotters (11" and 30")
- Gould plotter (11")
- OS/MVT with HASP

SYSTEM/360 MODEL 65

- located in McLennan Physical Laboratories
- provides Interactive Systems Service
- 1536K bytes of core
- 24 disk drives (2314)
- 3 9-track magnetic tape drives
- 1 printer
- 1 card reader
- 1 card punch
- 140 typewriter terminals
- OS/MVT with APL, ATS and CPS

7094 II

- located in Room 1203 Burton Tower
- 32K words of core
- 1 disk
- 8 magnetic tape drives
- input/output via a 1401 computer

COMPUTER RESEARCH FACILITY

- located in SF207
- DEC GT44 Systems with
  - 1 PDP-11/40 CPU
  - 2 9-track dual density tape drives
  - 1 1000 cpm card reader
  - VT17 graphics display unit
  - 1 lab. peripheral system with A/D & D/A
  - 1 CVI 260 Video Bandwidth Compressor
- DEC GT40 System with
  - 1 PDP-11/10 CPU
  - 1 2314 tape disk drive
  - 1 VT12 graphic display unit
  - 9-track/800 BPI tape drive
  - 1 Calcomp microfilm plotter

SUPPLEMENT

UTCC DIRECTORY

	ROOM	PHONE 928-
DIRECTOR		
John C. Wilson	SF143	6496
ASSOCIATE DIRECTOR		
Al Heyworth	SF116	4936
ADMINISTRATION MANAGER		
Anthony Pieterse	SF137	8948
INFORMATION OFFICE		
General Inquiries	SF128	4990 or 4991
Don Gibson	SF128A	
MANAGER, SERVICES		
Stan Yagi	SG200	7331
SUPERVISOR, MARKETING SERVICES AND CONTRACT PROG'G.		
Dave Scobie	SG201	6877
TERMINAL CO-ORDINATORS		
Sandford Fleming Terminal		
Mark Tapia	SF125	7109
Program Advisors	SF117	8599
Erindale		
Vaughan Lawrason		828-5311
Scarborough		
Ralph Lombardi		284-3173
Arts and Science		
Marlene Domoney	SS2104	6509
Management Studies		
Paul Roth		4917
~~MANAGER, APPLICATIONS SUPPORT~~		
~~Joyce Walton~~	~~SG204~~	~~6875~~
MANAGER, OPERATIONS		
Derry Cox	SF113	7002
MANAGER, SYSTEMS		
Rein Mikkor	SF113	5058
SYSTEM HARDWARE SUPERVISOR		
Eugene Siciunas	SF113	4967
SUPERVISOR, 7094 SERVICES		
William Beasley	NP1207	7094
MANAGER, COMPUTER RESEARCH FACILITY		
Dennis Smith	SF214B	4800
LAB CO-ORDINATOR (CRF)		
Krishna Patnaik	SF207	8858

	ROOM	PHONE
CONTRACT PROGRAMMING		
Dave Scobie	SG201	6877
AUTHORIZATION CLERK		
Yvonne Bowen	SF139	8703
ASSISTANT MANAGER, INFORMATION SYSTEMS TERMINAL		
George Milo		5040

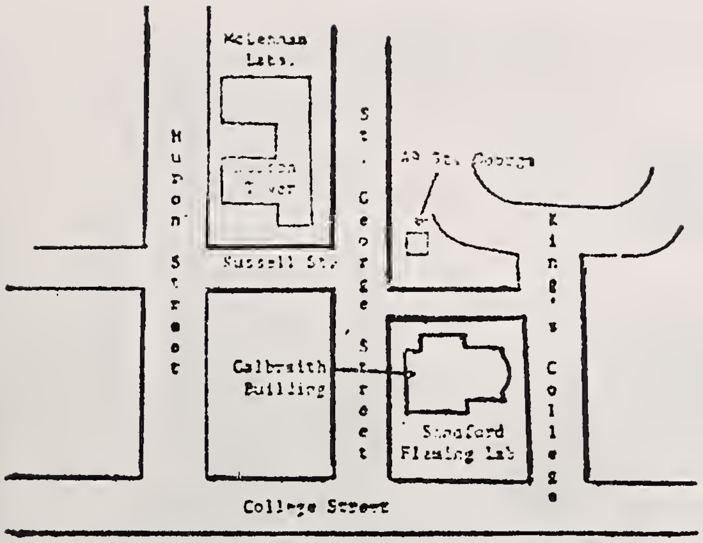
NOTE:

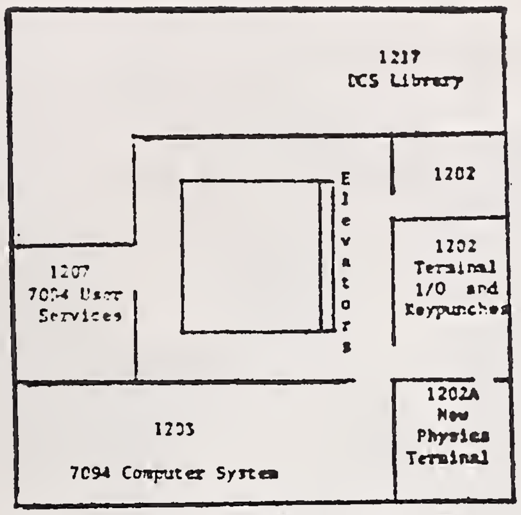
SF = Sandford Fleming
SG = 49 St. George
NP = McLennan Physical (New Physics)
SS = Sydney Smith

JOB AND SYSTEM STATUS QUERIES

SYSTEM/370, TSO	7373
ATS/APL	6234
7094	7094
2741 TERMINAL MALFUNCTIONS	7107
029 KEYPUNCH MALFUNCTIONS	6465

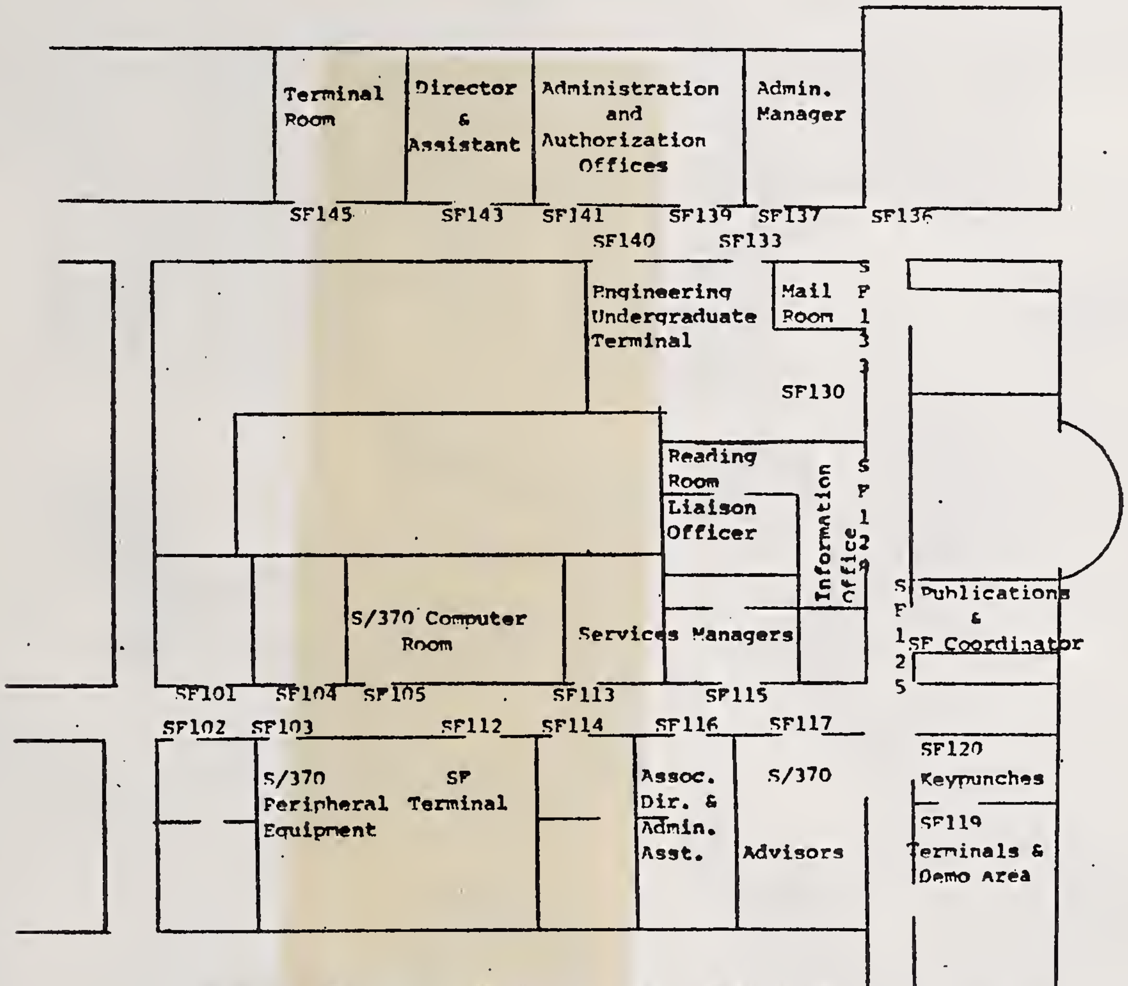
SERVICES	DIAL-UP	ADVISE
APL (2741)	7200	6710
APL (ASCII)	7243	7107
TSO - 2741	7303	8599
TSO - TTY (10 cps)	7390	8599
TSO - TTY (30 cps)	7386	8599
DATATALK	6710	6710



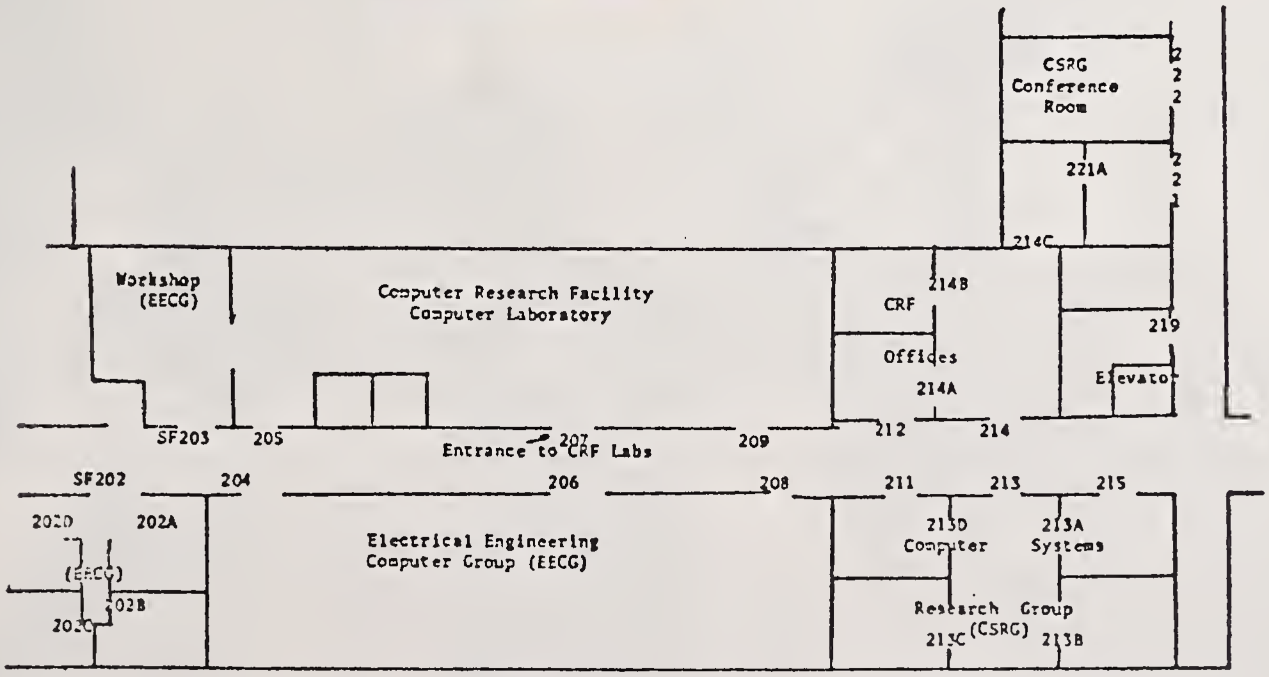

1217 DCS Library
1202
1202 Terminal I/O and Keypunches
1207 7094 User Services
Elevators
1203 7094 Computer System
1202A New Physics Terminal

FLOOR PLAN: TWELFTH FLOOR, BUXTON TOWER

UNIVERSITY OF TORONTO COMPUTER CENTRE



FLOOR PLAN: FIRST FLOOR, SANDFORD FLEMING LABORATORIES



FLOOR PLAN: SECOND FLOOR, SANDFORD FLEMING LABORATORIES

UNIVERSITY OF TORONTO
COMPUTER CENTRE,
TORONTO, CANADA.

CAMPUS DELIVERY

DR.J.C.WILSON
DIRECTOR
U T C C
SANDFORD FLEMING BLDG.
ROOM 143
UNIVERSITY OF TORONTO

COMPUTER CENTRE OPEN HOUSE

Ian Darwin Photos